

PREVENTION OF OBESITY IN CHILDREN AND ADOLESCENTS AND MODERN TECHNOLOGIES OF MEDICAL REHABILITATION

G.A.Mamatkhuzhayeva¹  A.Sh.Arzikulov¹ 

1.Andijan State Medical Institute, Andijan, Uzbekistan.

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Correspondence

Mamatkhuzhayeva Gulhae
Azizbek kizi, Andijan State
Medical Institute, Andijan,
Uzbekistan.

e-mail: dr_mgulhoyo94@mail.ru

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Abstract.

The article is a review. The literature data devoted to the prevention and rehabilitation method of obesity in children and adolescents are presented in the light of recent years of publications in both our and foreign medical literature. Data analysis indicates that obesity developing at an early age is a serious factor in the development of metabolic syndrome and premature mortality in adulthood. Timely rational use of modern rehabilitation technologies aimed at already developed obesity and its prevention indicates that weight control can be achieved by using a multicomponent intervention in changing the eating habits, lifestyle, physical activity of the child, with the involvement of all members of his family and environment.

Key words: children and adolescents, physical development, body mass index, excess body weight, obesity.

So'nggi yillarda dunyoning barcha mamlakatlarida semirishning intensiv tarqalishi kuzatilmoqda, bu qon tomir «halokatlar»i va erta o'limning rivojlanishiga yo'l qo'yimaslik uchun erta yoshdan boshlab allaqachon rivojlangan semirishning oldini olish va davolash bo'yicha kompleks reabilitatsiya choralarini ko'rish zarurligini taqozo etmoqda. Hozirgi vaqtda kattalar va bolalarda vazn yo'qotish fonida ko'plab kasalliklar kechishida sezilarli yaxshilanishga shubha yo'q.

Yaqinda o'tkazilgan tadqiqot shuni ko'rsatdiki, kam energiyali dietaning qisqa kurslari psorioartritli artritli bemorlar holatini sezilarli darajada yaxshilashga olib keldi, bu artrit faolligining pasayishi va psoriasisning teri ko'rinishining pasayishi bilan namoyon bo'ldi [1].

Yaqinda Eronda o'tkazilgan keng ko'lamlı tadqiqotda 13,486 talaba ishga qabul qilindi, ularning 9,7 foizi ortiqcha vaznli va 11,9 foizi semirib ketgan. Ko'p faktorli modelda bolalik semizligini shakllantirishning asosiy omillari: erkak jinsi (OR 1,58), shahar sharoitida yashash (OR 1,58), semirishning oilaviy tarixi (OR = 2,04), nonushtadan bosh tortish (OR 1.46), shuningdek, tug'ilishda homila vaznining ortishi qayd etilgan [2].

15 ta tadqiqotning meta-tahlilida ta'kidlanishicha, faol kardiorespirator fitnes bilan shugullanish statinlarni qabul qilish fonida qandli diabet rivojlanish xavfini kamaytirish bilan birga keladi va muntazam ravishda fitnes bilan shug'ullanayotganda tana vaznini yo'qotish 2-tip qandli diabet rivojlanishining oldini olishning eng maqbul usuli hisoblanadi [3].

Bronxial astma bilan og'rigan semiz bemorlarning tana vaznining pasayishi qondagi IL-8 (p = 0,002), C-reaktiv oqsil (p = 0,003), leptin (p = 0,001) darajasining sezilarli darajada pasayishi va TNF-a (p = 0,007), shuningdek, IL-6 (p = 0,004) va adiponektin (p = 0,025) ning sezilarli o'sishi bilan birga keldi.. Bundan tashqari, balg'amdagi TNF-a darajasida sezilarli pasayishi kuzatildi (p < 0,001), bu bronxial astmaning barqaror kechishiga erishish bilan birga keldi [4].

Olti oy davomida haftasiga uch marta o'rtacha intensivlikdagi aerobik mashqlarni bajarish yurak ritmi regulyatsiyasini, o'zgaruvchanligi, kattalarda semizlik 2-toifa diabet bilan birga kechgangdagi yaxshilash bilan bog'liqligi haqida dalillar mavjud [5].

Tana massasi indeksining bosqichma-bosqich pasayishi bilan manfiy kaloriya balansiga olib keladigan ovqatlanish ratsioni va turmush tarzidagi o'zgarishlar semirib ketgan shaxslarni reabilitatsiya qilishning asosiy jihati bo'lib, bu jarayon erta bolalikdan boshlanishi kerak, ayniqsa bolalik davrida semirish uchun xavf omillarini aniqlashda muhim ahamiyatga ega [6].

Reabilitatsiya faoliyatining asosiy maqsadi past kaloriyalı dieta orqali tez vazn yo'qotishga erishish emas balki ovqatlanish va turmush tarzi odatlarini doimiy ravishda o'zgartirishdir. Ushbu jarayonga butun oilani jalb qilish va aniq maqsadlarni qo'yish juda muhimdir. Keyingi maqsad - bolaning tegishli o'sish sur'atini saqlab qolish va sog'lom

vazn-bo'y nisbatiga erishish; ortiqcha vaznni yo'qotish (ideal vaznga erishish kerak bo'lmasdan), xususan, mushak massasini saqlab qolgan holda yog' massasi kamaytirish; ruhiy salomatlikni yaxshilash (o'z-o'zini hurmat qilish, oziq-ovqat va organizmning to'g'ri munosabati, sog'lom hayot sifati); agar mavjud bo'lsa asoratlarni iloji boricha tezroq davolash va minimallashtirish.

Reabilitatsiya chora-tadbirlari boshlanishida klassik parhez terapiyasidan foydalangan holda muvozanatli va xilma-xil oziqlanish tavsiya etiladi. Tadqiqot natijalari shuni ko'rsatdiki, past kaloriya dietasi o'rta va uzoq muddatli istiqbolda samarali usul emas, chunki retsidivlar va muvaffaqiyatsizliklar ehtimoli yuqori va natijada parhezni tark etish yoki semizlikni yanayam yuqori bosqichga progressivlanishiga xavfi ortadi [7].

Ta'lim jarayoni bolaning o'zi va u yashaydigan oila a'zolarining ovqatlanish imtiyozlarini majburiy baholashdan, oziq-ovqat tarkibini, qabul qilingan qismlarni, oziq-ovqat iste'mol qilish chastotasini, ba'zi oziq-ovqat mahsulotlarini afzal ko'rish yoki rad etishni, ziravorlardan foydalanish chastotasi va tabiati, ovqatni tayyorlash va berish usulini baholashdan boshlanishi kerak. [8, 9].

Ovqatlanish xulq-atvorini baholashning ajoyib vositasi oziq-ovqat kundaligi bo'lishi mumkin, uni bolaning ota-onasi yoki o'smirning o'zi bilan birgalikda tuzishi va operator tomonidan baholanishi kerak [10].

Asosiy parhez maslahatlari quyidagilarni o'z ichiga olishi mumkin: kuniga besh marta ovqatlanish (uchta asosiy va ikkita gazak)[11], to'liq nonushtani o'tkazib yubormaslikka ishonch hosil qilish [12], ovqatlanish oralig'ida qo'shimcha ovqatlardan saqlanish [13], yuqori energiyali va ozuqaviy moddalar zichligi past bo'lgan ozuqalardan saqlanish (gazlangan yoki salqin ichimliklar, meva sharbatlari, fast-foodlar, yuqori energiyali gazaklar) [14], meva, sabzavot va don iste'molini oshirish [15], iste'mol qilinadigan oziq-ovqat miqdorini cheklash [16]

Agar gipokaloriyalik dietaga uzoq muddat rioya qilish zarur bo'lsa, zamonaviy adabiyotlar oqsillar uchun kuniga 1 g / kg, uglevodlar uchun kunlik umumiy kaloriyalarning 45-60% ni, oddiy shakar esa umumiy kaloriya miqdorining <15% ni tashkil etishni tavsiya qiladi. Yog'lar umumiy kunlik kaloriyalarning 20-35% ni tashkil qilishi kerak va 4 yoshdan boshlab to'yingan yog'lar umumiy kunlik kaloriyalarning 10% dan kam bo'lishi kerak. Juda past kaloriya dietadan foydalanish tez vazn yo'qotish uchun og'ir darajada, tanlangan semirib ketgan bemorlarda vazn yo'qotishning samarali rejimi bo'lishi mumkin, ammo bu cheklovchi dietaning davomiyligi 10 haftadan oshmasligi va ixtisoslashtirilgan pediatriya markazlarida tibbiy nazorat ostida o'tkazilishi kerak. Bu parhez ideal vaznga 1,5-2 g/kg protein, kuniga 20-25 g uglevodlar, multivitaminlar + minerallar va kuniga 2000 ml dan ortiq suv iste'molini o'z ichiga olishi mumkin [18].

Svetofor usulidan foydalangan holda mahsulot toifalarini ozuqaviy zichlik bo'yicha guruhlash orqali erishilgan ovqatlanish texnologiyalaridan foydalanish alohida qiziqish uyg'otadi, bu esa kaloriya iste'molini kuniga 1000-1500 kkalgacha kamaytirish orqali [19], 8-12 yoshli bolalarda tana massasi indeksining uzoq muddatda ham sezilarli yaxshilanishiga imkon beradi [20].

Semirib ketgan bolalarni har tomonlama reabilitatsiya qilishning majburiy komponenti, dietani cheklashdan tashqari, oqilona jismoniy faoliyatdir.

Jismoniy mashqlar tana tarkibini yaxshilaydi va kardiometabolik xavf omillarining kamayishiga olib keladi [21]. Yog' to'qimalari zahiralarning kamayishi bilan tana tarkibidagi o'zgarishlar jismoniy mashqlar samaradorligining mezoni hisoblanadi [22].

Hozirgi vaqtda maxsus dasturlar bo'yicha haftada kamida 2 marta va 60 daqiqa davom etadigan aerob mashqlari va qarshilik mashqlarining kombinatsiyasi faol qo'llaniladi [23].

Bugungi kunda yuqori intensivlikdagi mashqlar vazn yo'qotish uchun samaraliroq ekanligi haqida aniq dalillar yo'q, shuning uchun bolalar va o'smirlarga iloji bo'lsa, kuniga 60 daqiqa yoki undan ko'proq mashq qilishni tavsiya qilish kerak, bu asosan o'rtacha intensivlikdagi aerobik mashqlardan iborat bo'lishi kerak [24].

Kompleks reabilitatsiya chora-tadbirlarining bir xil darajada muhim jihati harakatsiz turmush tarziga qarshi turishdir. O'smirlar o'rtasida a'lo darajada amal qiladigan istiqbolli yo'nalishlardan biri bu jismoniy harakatsizlik bilan kurashish uchun qo'shimcha strategiyani ta'minlaydigan faol video o'yinlardan foydalanish. Albatta, bu o'yinlar faol sport mashg'ulotlarida qatnashish o'rnini bosa olmaydi, lekin ular bolalar kattalar nazorati ostida bo'lganda, energiya sarfini oshirishga yordam beradi [25].

Biroq, vazn yo'qotish va tana tuzilishini yaxshilash vositasi sifatida faol video o'yinlardan tizimli foydalanish tavsiya etilmaydi. Shu bilan birga, ushbu o'yinlar bir qator

ijobiy ta'sirlarga erishishga, xususan, qon tomir reaksiyasining kuchayishi, ijobiy xulq-atvor va psixosotsial ta'sirlarning shakllanishiga yordam beradi [26].

Ortiqcha tana vazniga qarshi kurashish bo'yicha kompleks reabilitatsiya tadbirlarining muhim jihati kognitiv xatti-harakatlar usullaridan foydalanish bo'lishi mumkin, ular osonlikcha qo'llanilmaydi va ko'p tarmoqli jamoaning maxsus tayyorgarligini talab qiladi [27].

Kognitiv texnologiyalarning muhim jihatlariga samarali maqsadlar qo'yish usullari, o'z-o'zini nazorat qilish (ovqatlanish va jismoniy faoliyat kundaliklarini yuritish orqali), rag'batlantirishni boshqarish, ijobiy mustahkamlash va kognitiv qayta qurish kiradi [28].

Ota-onalar va bolalar o'rtasida umumiy maqsadlar qo'yish [29] bilan butun oilaning turmush tarzini o'zgartirishga qaratilgan oilaviy xulq-atvorni davolash usullaridan foydalanish amaliyotda tobora ko'proq qo'llanilmoqda, chunki ota-onalar faol ishtirok etadigan tadbirlar samaraliroq bo'ladi.

Bolalarda semirishning oldini olish bo'yicha chora-tadbirlar homiladorlik davrida boshlanishi kerak. Ayollar homiladorlikni optimal vaznda rejalashtirishlari va turmush tarzini o'zgartirish orqali kilogramm ortishini ehtiyotkorlik bilan boshqarishlari kerak, chunki homiladorlik paytida ortiqcha vazn ortishi katta homilalar va bolada semirib ketish xavfi bilan bog'liq bo'lishi mumkinligi haqida dalillar mavjud [30-32]. Homiladorlik davrida tavsiya etilgan vazn ortishi dastlab normal vaznga ega bo'lgan ayol uchun 11,5 dan 16 kg gacha, dastlab ortiqcha vaznga ega bo'lgan ayollar uchun 7 dan 11,5 kg gacha va homiladorlikdan oldin semiz ayollar uchun 5 dan 9 kg gacha hisobga olinishi kerak [33].

Homiladorlik paytida va undan keyin chekishni to'xtatish uchun motivatsion ishlar faol ravishda olib borilishi kerak, chunki perinatal yoshda onaning chekishi homilaning tug'ilishdagi dastlabki vaznidan qat'i nazar, 7 yoshli bolada ortiqcha vazn xavfini oshiradi [34, 35].

Tug'ilgandan so'ng homila vaznini faol ravishda kuzatib borish kerak, chunki homila vaznining tez ortishi bolalik davrida ortiqcha vazn va semirish xavfini oshiradi [36]. Chaqaloqlarda semirishning oldini olish uchun 6 oylikgacha faqat ona suti bilan boqish tavsiya etiladi [37]. Ona sutidan tashqari qattiq ovqatlar va ichimliklar ratsionga 4 oydan so'ng va 6 oydan kechiktirmasdan kiritilishi kerak [38, 39]. Proteinni iste'mol qilish kunlik kaloriya miqdorining 15% dan kamrog'i bilan cheklanishi kerak [40, 41]. Bola shirin ichimliklardan voz kechishi kerak [42]. Optimal tana massasi indeksini saqlab qolish va maktabgacha va o'smirlilik davrida semizlik rivojlanishining oldini olish uchun besh marta ovqatlanish rejimiga kiritilgan 5 qism meva va sabzavotlar va sabzavot oqsillarini o'z ichiga olgan O'rta er dengizi dietasiga rioya qilish tavsiya etiladi [43, 44].

Fast-foodlar va salqin ichimliklar, shu jumladan gazli ichimliklar, alkogolli ichimliklar va energetik ichimliklar iste'molini cheklash kerak [45-47].

Semirib ketish rivojlanishining oldini olish uchun bolalar / o'smirlar kuniga o'rtacha 60 daqiqa o'rtacha yoki intensiv jismoniy faoliyatga sarflashlari tavsiya etiladi, bu esa chidamlilik, qo'llab-quvvatlash qobiliyati va moslashuvchanligining oshishi bilan birga, jismoniy va psixomotor rivojlanish uyg'unligiga hissa qo'shadi [48].

Semirib ketishning rivojlanishiga oid muhim profilaktik jihat uyquning davomiyligi va sifatidir, chunki qisqa uyqu davomiyligi neyroendokrin va metabolik ta'sirlar tufayli bolalar va o'smirlarda ortiqcha vazn va semirish uchun potentsial xavf omili ekanligi isbotlangan [49]. Meta-tahlil natijalari shuni ko'rsatdiki, uyqu davomiyligi tavsiya etilgan me'yordan past bo'lgan bolalarda semirib ketish xavfi ikki baravar ortadi [50].

Bolalar va o'smirlarda uyquning davomiyligi va sifatini yaxshilashning muhim usullaridan biri - yotishdan 30 daqiqa oldin barcha televizor va kompyuter ekranlarini o'chirishdir.

Xulosa qilib aytadigan bo'lsak, dalillarga asoslangan tahlillar shuni ko'rsatadiki, erta boshlangan semirish metabolik sindromning rivojlanishida va kelgusidagi erta o'limning muhim omili bo'lib hisoblanadi. Rivojlangan semirish va uning oldini olishga qaratilgan zamonaviy reabilitatsiya texnologiyalaridan o'z vaqtida oqilona foydalanish shuni ko'rsatadiki, tana vaznini nazorat qilish bolaning ovqatlanish odatlarini, turmush tarzini, jismoniy faolligini o'zgartirishga uning barcha oila a'zolarini va yaqinlarini jalb qilgan holda ko'p komponentli aralashuv yordamida erishish mumkin.

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